



**TITLE:** Colonoscopy in Patients with Constipation: Clinical Effectiveness and Guidelines

**DATE:** 06 March 2015

## RESEARCH QUESTIONS

1. What are the clinical benefits and harms of colonoscopy in patients under 50 years of age for investigating constipation?
2. What are the evidence-based guidelines for colonoscopy in patients under 50 years of age for investigating constipation?

## KEY FINDINGS

One non-randomized study and two evidence-based guidelines were identified regarding the use of colonoscopy in patients less than 50 years of age for investigating constipation.

## METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 2), University of York Centre for Reviews and Dissemination (CRD) databases, and ECRI, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2010 and February 27, 2015. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

## SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

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**Table 1: Selection Criteria**

<b>Population</b>	Patients under the age of 50 years with constipation, but with no family history of colon cancer, anemia, or weight loss
<b>Intervention</b>	Colonoscopy
<b>Comparator</b>	No colonoscopy; No comparator
<b>Outcomes</b>	Clinical benefits and harms; Guidelines
<b>Study Designs</b>	Health technology assessments, systematic reviews, and meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines

## RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

One non-randomized study and two evidence-based guidelines were identified regarding the use of colonoscopy in patients less than 50 years of age for investigating constipation. No relevant health technology assessments, systematic reviews, or randomized controlled trials were identified.

Additional references of potential interest are provided in the appendix.

## OVERALL SUMMARY OF FINDINGS

One non-randomized study<sup>1</sup> and two evidence-based guidelines<sup>2,3</sup> were identified regarding the use of colonoscopy in patients under 50 years of age for investigating constipation. Of note, the population in the non-randomized study was not limited to patients under 50 years of age.

A cross-sectional study<sup>1</sup> assessed the prevalence of abnormal colonic pathology detected by colonoscopy in patients presenting with constipation but without other high risk factors. The authors found that colonoscopy in this patient group had a lower yield of neoplastic lesions than that for patients undergoing routine screening colonoscopy. While the study included patients older than 50 years of age, the authors conducted subgroup analyses by age group and found a low detection rate for adenomas in patients under the age of 50 years. They recommended that colonoscopy for constipation should only be performed in patients over the age of 50.

One evidence-based guideline<sup>2</sup> does not recommend colonoscopy for all patients with chronic constipation, but suggests that it should be performed in patients over 50 years of age and in those with other clinical risk factors, such as alarm symptoms or a family history of colon cancer. The National Institute for Health and Care Excellence (NICE) guidelines<sup>3</sup> do not recommend the use gastrointestinal endoscopy to investigate idiopathic constipation in children and young people.

## REFERENCES SUMMARIZED

### Health Technology Assessments

No literature identified.

### Systematic Reviews and Meta-analyses

No literature identified.

### Randomized Controlled Trials

No literature identified.

### Non-Randomized Studies

1. Obusez EC, Lian L, Kariv R, Burke CA, Shen B. Diagnostic yield of colonoscopy for constipation as the sole indication. *Colorectal Dis.* 2012 May;14(5):585-91.

### Guidelines and Recommendations

2. Bove A, Pucciani F, Bellini M, Battaglia E, Bocchini R, Altomare DF, et al. Consensus statement AIGO/SICCR: diagnosis and treatment of chronic constipation and obstructed defecation (part I: diagnosis). *World J Gastroenterol* [Internet]. 2012 Apr 14 [cited 2015 Mar 5];18(14):1555-64. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3325520>  
*See: Clinical Evaluation and Scoring Systems, pages 1557-8*
3. National Institute for Health and Care Excellence. Constipation in children and young people: diagnosis and management of idiopathic childhood constipation in primary and secondary care [Internet]. London: NICE; 2010 May. (NICE clinical guideline 99). [cited 2015 Mar 5]. Available from: <https://www.nice.org.uk/guidance/cg99/resources/guidance-constipation-in-children-and-young-people-pdf>  
*See: 1.3 Clinical Investigations (Endoscopy), page 17*

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**APPENDIX – FURTHER INFORMATION:**

**Systematic Review – Unclear Population Age**

4. Power AM, Talley NJ, Ford AC. Association between constipation and colorectal cancer: systematic review and meta-analysis of observational studies. *Am J Gastroenterol*. 2013 Jun;108(6):894-903.

**Non-Randomized Studies – Unclear Population Age**

5. Marquez A, V, Sewitch MJ, Joseph L, Barkun AN. Rates of minor adverse events and health resource utilization postcolonoscopy. *Can J Gastroenterol Hepatol*. 2014 Dec;28(11):595-9.
6. Gupta M, Holub J, Knigge K, Eisen G. Constipation is not associated with an increased rate of findings on colonoscopy: results from a national endoscopy consortium. *Endoscopy* [Internet]. 2010 Mar [cited 2015 Mar 5];42(3):208-12. Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3846169>